

Topic: CLOUD COMPUTING

Cloud computing is a rapidly evolving field, and the future of cloud computing is a topic of much research and discussion. There are a number of trends that are expected to shape the future of cloud computing, including the rise of hybrid and multi-cloud architectures, the growth of edge computing, the increasing use of artificial intelligence and machine learning, and the development of new cloud-native technologies. These trends are expected to lead to more efficient, scalable, and secure cloud computing solutions.

In addition to these trends, there are a number of research questions that are being explored in the field of cloud computing. These questions include how to design cloud architectures that are more efficient and scalable, how to use AI and ML to automate tasks in cloud computing, how to secure cloud data and applications, and how to make cloud computing more accessible to businesses and individuals in developing countries.

The future of cloud computing is bright, and there are many exciting opportunities for research in this field. The research that is will be conducted by me will help to shape the cloud computing landscape of tomorrow.

(Buyya et al., 2018; Chasins et al., 2022; Islam et al., 2023; Zhao, 2024) Buyya, R., Netto, M. A. S., Toosi, A. N., Rodriguez, M. A., Llorente, I. M., Vimercati, S. D. C. Di, Samarati, P., Milojicic, D., Varela, C., Bahsoon, R., Assuncao, M. D. De, Srirama, S. N., Rana, O., Zhou, W., Jin, H., Gentzsch, W., Zomaya, A. Y., Shen, H., Casale, G., ... Vaquero, L. M. (2018). A Manifesto for Future Generation Cloud Computing. *ACM Computing Surveys*, 51(5). Chasins, S., Cheung, A., Crooks, N., Ghodsi, A., Goldberg, K., Gonzalez, J. E., Hellerstein, J. M., Jordan, M. I., Joseph, A. D., Mahoney, M. W., Parameswaran, A., Patterson, D., Ada Popa, R., Sen, K., Shenker, S., & Song, D. (2022). The Sky Above The Clouds A Berkeley View on the Future of Cloud Computing. *Computing Research Repository*. Islam, R., Patamsetti, V., Gadhi, A., Gondu, R. M., Bandaru, C. M., Kesani, S. C., & Abiona, O. (2023). The Future of Cloud Computing: Benefits and Challenges. *International Journal of Communications, Network and System Sciences*, 16(04). <https://doi.org/10.4236/ijcns.2023.164004> Zhao, N. (2024). Improvement of Cloud Computing Medical Data Protection Technology Based on Symmetric Encryption Algorithm. *Journal of Testing and Evaluation*, 52(1). <https://doi.org/10.1520/JTE2021-0456>